

**From:** [REDACTED]  
**To:** [Great Yarmouth Third River Crossing](#)  
**Subject:** TR010043: Great Yarmouth Third River Crossing  
**Date:** 22 October 2019 20:08:46  
**Attachments:** [REDACTED]

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Dear Mr Young

Please find attached the LIR from Norfolk County Council (as relevant planning authority) in response to deadline 2

If you have any queries, do not hesitate to contact me.

Regards

**Angelina Lambert, Principal Planner** [GYTRC@planninginspectorate.gov.uk](mailto:GYTRC@planninginspectorate.gov.uk)

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# Norfolk County Council

Great Yarmouth Third River Crossing

Local Impact Report (LIR)

Prepared by Norfolk County Council as relevant  
Planning Authority

Nationally Significant Infrastructure Project (NSIP)

Reference: TR010043

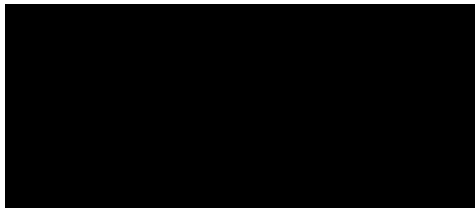
October 2019

# Great Yarmouth Third River Crossing

## Local Impact Report (LIR)

Prepared by Norfolk County Council as relevant  
Planning Authority

Signature



Name: Nick Johnson

Title: Head of Planning

Date: 21/10/2019

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# 1. Introduction

- 1.1 This report comprises the Local Impact Report (LIR) of Norfolk County Council (the County Council) as the relevant planning authority, in relation to the application by NCC as Highway Authority (the Applicant) for the proposed Great Yarmouth Third River Crossing.
- 1.2 A LIR is defined in s60(3) of the Planning Act 2008, as amended, as “*a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)*”.
- 1.3 This report has been prepared in accordance with the Planning Inspectorate Advice Note One: Local Impact Reports (v2 2012) and covers issues that are considered relevant to the impact of the proposed development in the administrative area of Great Yarmouth.
- 1.4 This LIR deals with suggested topics in advice note one, the subject areas in the submitted Environmental Statement (ES) and the proposed requirements submitted in the draft Development Consent Order (DCO).
- 1.5 The County Council has not sought views of Great Yarmouth Borough Council, external consultees or other stakeholders regarding any matters that should be reflected in this report, because as statutory consultees and/or interested parties, they have opportunities during the examination to make observations direct to the examining authority.

# 2. Proposed Development

- 2.1 The full description of the proposed development is set out in Section 2 of the submitted ES Volume I: Main Text, (Document reference 6.1, version number 0, dated 30 April 2019). In summary, the proposed development comprises:
  - The construction, operation and maintenance of a new crossing of the River Yare in Great Yarmouth
  - A new dual carriageway road with a double leaf bascule bridge across the river, connecting Harfrey's roundabout to the west of the River Yare with South Denes Road (A1243) to the east of the River Yare;
  - Sub structures to support the double leaf bascule bridge;
  - A five-arm roundabout on William Adams Way at the junction with Suffolk Road and the western end of Queen Anne's Road;
  - A single span bridge over Southtown Road
  - A new signal-controlled junction at the junction of South Denes Road with Sutton Road
  - A control tower with a maximum height of 20m AOD, located south of the crossing on the western side of the river
  - A plant room located on the eastern side of the river for the operation of the opening span of the bridge
  - The reinstatement of the MIND centre adjacent Williams Adam Way
  - Relocation of an allotment area, north of Queen Anne's Road
  - Associated landscaping and drainage measures

### 3. Site description and surrounding area

- 3.1 The area the subject of this DCO, identified as the 'Order Limits' lies wholly within the administrative area of both the County Council and Great Yarmouth Borough Council.
- 3.2 The Borough of Great Yarmouth is located on the east coast of Norfolk. The towns of Great Yarmouth and Gorleston-on-Sea are situated at the mouth of the River Yare, and adjacent to the Norfolk Broads. The River Yare divides Great Yarmouth and Gorleston-on-Sea. The port is located in the River Yare with Great Yarmouth to the east and Gorleston-on-Sea to the west of the river, with the outer harbour located on the South Denes peninsula which lies between the River Yare and the sea.
- 3.3 Great Yarmouth is served by the A47 trunk road. The make-up of the area is predominately mixed urban development with residential properties to the north, south and west of the principal application site. To the east of the A47 is the Great Yarmouth port. Immediately south of the principal application site is Southtown Common. To the south and west of the River Yare and South Denes Peninsula is Gorleston-on-Sea, defined in the settlement hierarchy as a main town.
- 3.4 The principal application site is not located within a Conservation Area. However, 3 of the satellite application sites lie partially within a Conservation Area. According to the Environment Agency (EA) flood risk map, the principal application site lies within flood zones 2/3.

### 4. Relevant planning history

- 4.1 There is no relevant planning history held by the County Council for development within the Order Limits. To assist the Applicant in producing the Cumulative Effects Assessment Chapter of the ES, the planning history held by the County Council relating to sites within 5km of the principal application site was provided to the Applicant's technical consultant during the pre-application process.

### 5. Relevant Planning Policy Framework

- 5.1 The proposed scheme has been accepted by the Planning Inspectorate on behalf of the Secretary of State for Transport to be treated as a National Significant Infrastructure Project (NSIP). Such applications are determined in accordance with the decision-making framework set out in s104(2), of the Planning Act, as amended, which amongst other criteria includes the relevant National Policy Statement (NPS). In this case, the Department for Transport NPS for National Networks (2014), is relevant.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/387223/npsnn-web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387223/npsnn-web.pdf)
- 5.2 The NPS reflects the importance of delivering well connected networks, supporting national and local economic growth.
- 5.3 In delivering new development the NPS recognises that there may be adverse impacts and sets out the need to ensure development is appropriately mitigated to minimise environmental, social and economic impacts.

5.4 s38(3) of the Town and County Planning Compulsory Purchase Act 2004, as amended, describes the Development Plan for England as the development plan documents which have been adopted or approved in relation to that area and the neighbourhood development plans which have been made in relation to that area. The relevant Development Plan Documents are identified below.

5.5 **Great Yarmouth Borough Council Local Plan: Core Strategy 2013 – 2030**

5.6 The Core Strategy sets out the spatial vision and objectives for how the Borough will develop and grow during the plan period 2013 – 2030. To deliver the vision of the Borough, the Core Strategy sets out strategic objectives and core policies to ensure development minimises the impact on the environment, addresses local social issues, promotes economic growth and investment to the area, protects and enhances the quality of the built and natural environment and delivers key infrastructure. The adopted Core Strategy partially replaces policies in the Great Yarmouth Borough Council Wide Local Plan (2001) and is a material consideration when determining planning applications.

5.7 Policy SO7 Securing the delivery of key infrastructure recognises the importance for the Great Yarmouth Third River Crossing as a strategic objective of the Core Strategy and Policy CS16 safeguards the route.

5.8 In addition, the Local Plan Policies Map (central) that accompanies the Core Strategy, identifies a Great Yarmouth Third River Crossing route.

5.9 The following strategic objectives and development management policies of the Core Strategy are considered relevant to the proposed development:

<https://www.great-yarmouth.gov.uk/CHttpHandler.ashx?id=1884&p=0>

- SO1: Minimising our impact on the environment
- SO2: Addressing social exclusion and reducing deprivation
- SO4: Strengthening the competitiveness of the local economy
- SO6: Protecting and enhancing the quality of the local environment
- SO7 Securing the delivery of key infrastructure
- Policy CS1: Focusing on a sustainable future
- Policy CS2: Achieving sustainable growth
- Policy CS6: Supporting the local economy
- Policy CS9: Encouraging well-designed, distinctive places
- Policy CS10: Safeguarding local heritage assets
- Policy CS11: Enhancing the natural environment
- Policy CS12: Utilising natural resources
- Policy CS13: Protecting areas at risk of flooding and coastal change
- Policy CS14: Securing essential new infrastructure
- Policy CS15: Providing and protecting community assets and green infrastructure
- Policy CS16: Improving accessibility and transport

5.10 **Saved policies of the Great Yarmouth Borough-Wide Local Plan (2001)**

5.11 The Local Plan was adopted in 2001. Several policies were 'saved' in 2007, remain in force and form part of the Development Plan. A further assessment of the policies was made in 2015 during the adoption of the Core Strategy.

The remaining policies are expected to be superseded by the emerging plan currently being prepared.

- 5.12 The saved policies that apply to the proposed development are as follows:

<https://www.great-yarmouth.gov.uk/CHttpHandler.ashx?id=1585&p=0>

EMP25: Creation / rationalisation of roads within the port operational area

REC11: Protection of community and street scene

- 5.13 **The emerging Great Yarmouth Draft Local Plan Part 2 – further focused changes**

<https://www.great-yarmouth.gov.uk/article/5193/Emerging-planning-policies>

- 5.14 Great Yarmouth Borough Council are currently preparing the Local Plan Part 2, that will sit alongside the current Core Strategy and include details of policies and site allocations to deliver growth for the plan period up to 2030. A consultation was carried out during 20 August 2018 – 30 September 2018 and comments received resulted in amendments to the draft. The Council recently consulted on the further focused changes during 19 August 2019 – 6 October 2019. It is proposed to submit the draft Local Plan to the Secretary of State for examination in spring 2020. Hearing sessions are anticipated to be held in spring/summer 2020, with adoption of the emerging plan expected in winter 2020.

- 5.15 The route of the Great Yarmouth Third River Crossing is indicated on the Great Yarmouth Borough Council Draft Local Plan Policies Map for Great Yarmouth and Gorleston-on-Sea Areas (sheet 2 of 2, further focussed changes consultation, August 2019)

<https://www.great-yarmouth.gov.uk/CHttpHandler.ashx?id=4640&p=0>

- 5.16 **Norfolk Minerals and Waste Development Framework: Core Strategy and Minerals and Waste Development Management Policies and Development Plan Document 2010-2026 (2011)**

- 5.17 As part of the Local Development Framework, the Core Strategy sets out the spatial vision for future mineral extraction, associated development and waste management facilities in Norfolk.

- 5.18 The relevant minerals and waste safeguarding policy is as follows:

<https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning-policies/adopted-policy-documents>

- 5.19 Core Strategy Policy CS16 - Safeguarding mineral and waste sites and mineral resource, seeks to safeguard existing, permitted and allocated mineral extraction and associated development and waste management facilities.

- 5.20 **Minerals and Waste Local Plan Review**

<https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/minerals-and-waste-planning-policies/norfolk-minerals-and-waste-local-plan-review>

- 5.21 The County Council is currently preparing a Minerals and Waste Local Plan, which will extend the plan period up to 2036 and consolidate 3 DPD's – the Core Strategy and Minerals and Waste Development Management Policies and Development Plan Document 2010-2026 (2011), Minerals Site Specific Allocations DPD (2013, amendment adopted 2017) and Waste Site Specific Allocations DPD (2013). Once adopted the Local Plan will be used to determine applications for County matters minerals and waste development.
- 5.22 The County Council is currently consulting on the preferred options, which will run until 30 October 2019. It is intended to submit the draft Local Plan to the Secretary of State in September 2020, for examination in January 2021. Adoption is anticipated in September 2021.
- 5.23 **Other material considerations**
- 5.24 Norfolk's Local Transport Plan (2011) sets out the strategy and policy framework for transport in Norfolk up to 2026. To contribute to the economic growth of Norfolk Policy 7 recognises the importance of enhancing strategic connections to the international gateway of Great Yarmouth port and identifies the Great Yarmouth Third River Crossing as one of Norfolk's key strategic connections.
- 5.25 Other material considerations include the National Planning Policy Framework (NPPF) (2019), and the National Planning Policy Guidance (NPPG). Whilst not part of the development plan, they are taken into consideration when preparing local plans and in planning decisions.

## 6. Local Impacts

- 6.1 The local impacts set out below relate to the County Council's statutory function and advisory role.

## 7. Landscape and Visual Impact

- 7.1 Core Strategy Policy CS9 (Encouraging well-designed, distinctive places) encourages all new development to be of a high-quality good design and sets out the design criteria proposals are expected to meet.
- 7.2 Core Strategy Policy CS11 (Enhancing the natural environment) seeks to improve the Borough's natural environment and avoid harmful impact on the landscape and its setting.
- 7.3 Chapter 10 of the ES (Document reference 6.1, version number 0, dated 30 April 2019) assesses the landscape and visual impacts during the construction and operation of the proposed development. Methodology and baseline assessments are considered appropriate and in line with current industry guidelines and best practice. In addition, existing viewpoints (Document reference 6.3 – ES Figures: Chapter 10, version number 0, dated 30 April 2019) and photomontages (Document reference 6.12: Photomontages, version number 0, dated 30 April 2019) have been produced to assist in the assessment of the visual impacts.
- 7.4 The area surrounding the principal application site is predominately a mix of residential, industrial and port uses. Residential properties and retained historic features create a much more human scale street scene, allowing for

long distance views along roads and between buildings. The demolition of buildings to facilitate the introduction of the proposed bridge and associated infrastructure, by virtue of its nature and scale will have a noticeable impact on the landscape character of the surrounding area.

- 7.5 It cannot be denied that there will be changes to the area, both during construction and in operation. However, the proposal has the potential to have a beneficial effect on the area, which is considered to be degraded and lacks a sense of place.
- 7.6 Subject to finalising the approach to detailed design and a landscaping scheme, it is considered that with the appropriate wording of requirements 4 (design of authorised development) and 6 (landscaping scheme) of the draft DCO, the impacts can be minimised and acceptable mitigation proposed where possible.
- 7.7 There is a need to ensure there is a close working relationship between the applicant, technical specialists and appointed contractor to deliver a successful landscaping scheme that takes account of any required drainage and biodiversity measures.

## 8. Historic Environment

- 8.1 Core Strategy Policy CS10 (Safeguarding local heritage assets) states that development proposals should conserve and enhance the significance of the Borough's heritage assets and their settings, such as Conservation Areas, Listed Buildings, Scheduled Ancient Monuments, archaeological sites, historic landscapes including historic parks and gardens, and other assets of local historic value.
- 8.2 The views in terms of harm to heritage assets and/or their settings are those of the County Council and mostly mirror those set out in the ES. It is considered that any harm caused to heritage assets by the construction and use of the roads and bridge is outweighed by the public benefits resulting from their use (see below, paragraph 8.7).

### Listed Buildings

- 8.3 It is considered that the proposal for a new bridge and associated road infrastructure will affect the setting of the below listed buildings:
- The Dolphin Public House (Grade II);
  - Gas holder, Barrack Road (Grade II); and
  - Nelson's Monument (Grade I)
- 8.4 The Dolphin Public House formerly, the Fish Wharf Refreshment Rooms, was constructed in the early 20th century in a distinctive style including marine themed decorative tiles. The eastern side of the new bridge and road connecting it to South Denes Road will pass within approximately 20m of this building. The Dolphin was constructed within an industrial fishing port. Many of the other buildings and structures associated with the Fish Wharf have been changed and renewed during the 20th century. Although the effect of the new bridge and road on the setting of this designated heritage asset will be considerable the overall effect is considered to be neutral. The building has been disused and boarded up for a number of years. Construction of the

new bridge and roads may offer opportunities to repurpose this building characteristic of Great Yarmouth's townscape and early 20th century architecture.

- 8.5 The gas holder on Barrack Road is of late 19th century date and is located approximately 150m east of the proposed development. Construction of the bridge and road will have negligible long-term effect on the height and prominence of this industrial structure, which constitutes an important part of its setting. The effect on the setting of this heritage has been judged to be moderate adverse within the ES.
- 8.6 Nelson's Monument is located approximately 700m southeast of the new bridge and road. It was constructed in 1817, more than 20 years before Nelson's Column in London. When raised it is considered the new bridge will affect the setting of this designated heritage asset, but no more than a number of other existing buildings and structures in the South Denes area.
- 8.7 When considering this in the context of national and local heritage related planning policies, overall the effects on the setting of the heritage assets is considered by the County Council to be less than substantial harm, weighed against the public benefits, which are considered to:
- ensure optimum viable use;
  - generate employment during construction;
  - increase economic activity in the Borough after construction;
  - continue to develop Great Yarmouth as a centre for both offshore renewable energy and the offshore oil and gas industry;
  - enhance the port role as an international gateway;
  - improve local access and strategic connectivity; and
  - to improve access to the peninsula for road and other users

#### Conservation Areas

- 8.8 Whilst the principal application site does not lie within a Conservation Area, two of the satellite application sites lie within the Saint Nicholas/Northgate Conservation Area and one lies partly within the Hall Quay/South Quay Conservation Area. Overall the impact of the installation of the new signage within the existing urban setting is considered to constitute less than substantial harm to the Conservation Areas (see below, paragraph 8.10).

#### Non-Designated buildings

- 8.9 To facilitate the proposed development will require the demolition of a number of brick-built terraced houses of late 19th century date. The loss of these properties is permanent and irreversible. However, these are considered to be low value non-designated Heritage assets whose loss can be mitigated through a programme of historic building recording of a sample of them prior to the commencement of any demolition.

#### Designated Heritage assets within the medieval town of Great Yarmouth

- 8.10 The proposed development includes the installation of Variable Message Signs (VMS) at six (satellite) locations, three within the medieval walled town of Great Yarmouth in proximity to various designated heritage assets. Over the impact of the installation of the new signage within the existing urban

setting is considered to constitute less than substantial harm to the settings of the built heritage assets. The impact on below ground archaeology will be negligible.

#### Archaeology

- 8.11 The Written Statement of Investigation (WSI) has been produced taking into account the data, interpretations and conclusions set out in Historic Environment Desk-Based Assessment (DBA) of the ES (Document reference 6.2: Technical Appendix 9B, version number 0, dated 30 April 2019). The principal application site is located 750m south of the medieval town of Great Yarmouth in an area with a relatively modest potential for below-ground archaeology. The DBA and the accompanying Geoarchaeological borehole review and deposit modelling in the ES (Document reference 6.2 – Technical Appendix 9C, version number 0, dated 30 April 2019) have identified two potential foci with potential for the new bridge and roads to impact on below-ground archaeological and paleo-environmental remains. These are:
- Breydon Peat formation located below the western section of Williams Adams Way
  - Alluvial deposits below the eastern bank of the Yare
- 8.12 The deposits of Breydon peat located below the western section have been identified as medium to high potential to contain paleo-environmental remains. These deposits are deeply buried, being overlain by more than 5m of made ground and Breydon formation alluvium. An additional borehole is to be sunk under the supervision of a geoarchaeologist or paleo-ecologist with the specific aim of obtaining samples for paleo environmental analysis and radio-carbon 14 dating. The impact the construction of the new road will have on the Breydon peat formations will depend on the details of the methods of construction to be used. It is likely that the paleo-environmental work described above will constitute the totality of the evaluation/mitigation work required in relation to the Breydon peat. Currently available information indicates that the made-ground deposits on the western side of the Yare are of no archaeological significance.
- 8.13 On the eastern side of the Yare the lower elements of the 2.0m of made ground and the alluvial deposits beneath the made ground may be of archaeological and paleoenvironmental significance. Further investigation in the form of one or more shored archaeological mitigatory trenches will be required. The exact location and nature of this work will need to be determined based on a consideration of more detailed information on design and construction methods and is secured through requirement 6 (archaeology) of the draft DCO.

## **9. Flood Risk (including surface water flooding)**

- 9.1 By directing new development proposals away from the area of highest risk of flooding, ensuring new development takes account of the EA flood defence proposals, seeking the use of Sustainable Drainage Systems (SuDS) to manage surface water flood risk, and applying appropriate flood mitigation measures, Core Strategy Policy CS13 (Protecting areas at risk of flooding or



coastal change) seeks to ensure a sustainable approach to flood risk and ensure development does not increase the risk of flooding elsewhere.

- 9.2 Regarding flood risk, all sources of flooding should be considered. This LIR focuses on surface water flooding, groundwater flooding and fluvial flooding from ordinary watercourse as the statutory function of the County Council as Lead Local Flood Authority (LLFA).
- 9.3 The whole area of the principal application site, and three satellite application sites (Sheets 1 to 5 on General Arrangement Plans Document 2.2, version number P00, dated 30 April 2019) are located within two critical drainage catchments (CDC's) defined by the LLFA in partnership with Great Yarmouth Borough Council, Anglian Water (AW) and the EA. These are Claydon, Southtown and Cobham on the west of the River Yare and South Yarmouth on the east of the Yare. These can be viewed at <https://www.norfolk.gov.uk/-/media/norfolk/downloads/rubbish-recycling-planning/flood-and-water-management/ncc-llfa-critical-drainage-catchments-2019.pdf>). CDC's are local areas where significant properties are at risk of flooding and have experienced flooding in the past where a co-ordinated approach to flood risk management would be beneficial. Attached are figures 1 and 2 (from Appendix F of the LLFA Surface Water Management Plan (Stage 2- July 2014)) to assist with the understanding of the CDC's and possible options for future flood risk management. It is recommended that the Applicant should consult these to understand the complex local risk of flooding and potential benefit the proposed development of the site could have. It should be noted that these CDC's were originally called Critical Drainage Areas (CDA's), but all references should be read as CDC.
- 9.4 Various historical records of flooding in the area are publicly available. The records that are near or are within the catchment of the Order Limits include flooding in:
- 2006 (figure 3)
  - Between 2016 and 2013 (figure 4)
  - Properties in 2014,
  - 14 properties in 2016 (figure 5) and
  - Approximately 39 properties on 6 October 2019.
  - Flooding near the east side of the development in 2016.
  - Historic AW records of flooding (DG5 records) up to 2017 include 4 incidences that are within post code NR30 3 (which covers the principal application site east and west of the River Yare - noted in the applicant's Flood Risk Assessment) but also 52 incidents in NR31 8 (which includes Burgh and Beccles Road in the same hydrological catchment as the principal application site). See Appendix A.
- 9.5 The applicant's Flood Risk Assessment (FRA) has identified that there are local sources of flooding from the ordinary watercourse, groundwater, sewer and surface water flooding. However, the impact of the development changing the risk of flooding and possible mitigation required need to be included. Historical information on local sources of flooding, above, should be considered in the FRA to inform the design of the development and mitigation, which may extend further than the principal application site. These changes

may include those on the drainage design, landscaping or offsite mitigation such as compensatory flood storage on Southtown Common.

- 9.6 The Strategic fluvial and coastal flood risk set out in the applicant's FRA, will be reviewed by the EA. From review of the relevant representation submitted by the EA dated 31 July 2019 and the Statement of Common Ground (Document reference NCC/GY3RC/EX/010 Appendix C of the Statements of Commonality, dated 8 October 2019) prepared between the Applicant and the EA, it is noted that the EA have not accepted the Applicant's FRA, and that this issue is currently under discussion.

#### Ordinary Watercourse Flood Risk

- 9.7 There is no flood risk mapping available for the ordinary watercourse in its own right, this is because it is less than 3km<sup>2</sup> and not included in the national model for fluvial flooding by the EA. However, this does need to be provided through appropriate revision of the FRA and modelling by the Applicant to show Flood Zone 2 and 3 of the Ordinary Watercourse. Any like for like mitigation required should be positioned as close as possible to the loss of any floodplain. Occasionally the EA Risk of Surface Water mapping can be used as a proxy as it indicates low ground where a small ordinary watercourse may be. It is not recommended this is used in this instance, as it will be very unreliable in a heavily urbanised area that is very flat in topography and contains many structures such as culverts.

#### Surface Water Flood Risk

- 9.8 EA Risk of Surface Water Flood Map shows the surface water flood risk for 3.33% Annual Exceedance Probability (AEP) (1:30 year), 1% AEP (1:100 year) and 0.1% AEP (1:1000) in the area and can be viewed in Plate 6.1 of the FRA. The new bridge, embankment and other infrastructure will be placed in areas where identified existing surface water flood risk will be displaced. However, the Great Yarmouth Strategic Flood Risk Assessment has mapped this 1% AEP plus 40% climate change and the application site can be viewed on tile GY\_16 <https://www.broads-authority.gov.uk/planning/planning-policies/sfra/sfra> This information is not included in the applicant's FRA and maybe useful to help determine the possible impacts of the proposed development and inform any possible mitigation measures required. The impact of the displacement of water on both the east and west side of the development should be assessed, and any mitigation required identified.

#### Sewer Flood Risk

- 9.9 Flooding, as defined by the Flood & Water Management Act 2010, includes precipitation induced sewer flooding. This is within the remit of the Water and Sewerage Undertaker, AW and mitigation should be agreed on how this will impact their network. The Applicant should still demonstrate how any drainage scheme connecting to this network would not increase the risk of flooding.

#### Groundwater Flood Risk

- 9.10 Groundwater flooding has been considered by the Applicant and it is accepted that groundwater may be close to the surface due to the proximity to the Sea

with which it naturally interacts. Any works such as large-scale piling will need to be considered so as not to cut off groundwater flow paths discharging to the sea or create spring lines e.g. as part of the embankment construction. It is welcomed that the drainage scheme may be lined where appropriate to prevent groundwater ingress.

#### Conclusion of FRA on Local Flood Risk Impacts

- 9.11 The impacts of all sources of flooding should be considered. The timing of the peak of the hydrograph (peak water level in response to rain) of the small watercourse and potential surface water flooding (and drainage scheme of the development) is different to that on the Strategic River Yare and Coastal Flooding. The County Council as LLFA recommends further evidence is produced to enable the Examining Authority (ExA) to consider the impacts and potential mitigation required to prevent the increase risk of flooding locally. The FRA indicates that mitigation for any impact from the development will be through the implementation of a SuDS scheme on the application site. Whilst this may mitigate additional permeability of the development, the County Council as LLFA recommends further information be provided to the ExA to demonstrate the potential impacts from removing possible flood storage areas adjacent to the Ordinary Watercourse, a key drainage route for the upstream catchment to the south and west. There is no evidence to suggest only runoff from the adjacent area (to be built on by the development) will be stored here and nothing will be conveyed from the upper catchment and stored on the site prior to passing downstream. Available historic information should be used to corroborate the predicted risk (as shown on the EA Risk of Surface Water Flooding Maps elsewhere). It is also recommended that the Applicant should provide evidence to demonstrate the proposed development will not increase the risk of flooding elsewhere or require mitigation to do so. This information would also inform the design of the drainage scheme to ensure it considers flooding constraints and will function as expected.

#### Conclusion of the Drainage Scheme on Local Flood Risk Impacts

- 9.12 The submitted Drainage Strategy should have initial baseline data to assess the likelihood of meeting the National Standards, including:
- Existing brownfield runoff rates and volumes for the 100%AEP (1:1 year), 3.33% AEP (1:30 year) and 1%AEP (1:100 year) runoff rate for the west side. A single runoff rate of 101l/s calculated for the 1% AEP (1:100 year) 6 hour event would not be equivalent to what would be discharged at the 1:1 year event. (ref section 2.3.12 of the Drainage Strategy: Document 6.2 ES volume II Appendix 12C)
  - Considering historical flooding in the area Greenfield runoff rates (1.2l/s) and volumes should be attained to meet National SuDS Standards for entirely new impermeable area on the eastern side of the bridge.
  - The SuDS hierarchy for source control, site control, should be considered and evidenced to be discounted prior to requesting AW control the water in a regional sewer network (connection of 10l/s on the eastern side). The impacts of increasing runoff at 10l/s is to add an additional volume of flooding by 5m<sup>3</sup> to sewer flooding already

modelled to occur in the area. (ref Appendix A of Statement of Common Ground with AW (Appendix N of the Statements of Commonality, dated 8 October 2019)

- Provide consistent information within the FRA and the Drainage Strategy e.g. greenfield runoff rates in the FRA for Qbar are 25.20 l/s for the whole application site, however the drainage strategy states a total of Qbar of 6.2 l/s for the whole application site (west side of the application site is 5l/s and the east side is 1.2l/s).

- 9.13 The LLFA would recommend that the post development runoff rates and volumes, SuDS design, water quality, management and maintenance plan to be provided by Requirement as indicated within the Statement of Common Ground with the LLFA (Document reference NCC/GY3RC/EX/010 Appendix D of the Statements of Commonality, dated 8 October 2019).
- 9.14 The County Council understands that the Applicant is in discussion with both the LLFA and EA regarding outstanding flood risk issues and wishes to be kept informed on any changed or detailed drainage design. Subject to satisfactory resolution of the matters, it is considered that surface water drainage can be dealt with through appropriate wording of Requirement 10 (surface water drainage) in the draft DCO.

## 10. Biodiversity

- 10.1 Core Strategy Policy CS11 (Enhancing the natural environment) seeks to improve the Borough's natural environment and avoid harmful impact on biodiversity, priority habitats and species. The criteria of how this can be achieved is set out in the policy and includes:
- Conserving and enhancing designated nature conservation sites
  - Ensuring protected species are adequately protected from adverse impacts of development
  - Appropriate mitigation measures are delivered, and/or compensatory provision provided
- 10.2 The species and habitats surveyed to inform the Nature Conservation Chapter of the ES are appropriate, with additional survey work to be undertaken to enable the identification and assessment of the likely significant effects potential impacts to be made and identify any further licensing requirements, mitigation measures and recommendations for restoration and enhancements. Offsetting may be required where compensation and enhancement cannot be secured onsite.
- 10.3 European Protected Species (EPS) and international sites (Natura 2000 and Ramsar) were identified in the ES, with nationally and locally important habitats, and species of conservation concern also considered. The Preliminary Ecological Appraisal (PEA) was undertaken in 2016 with additional Phase 2 surveys undertaken in 2017, 2018 and 2019.

### Statutory and Non-statutory Designated Sites

- 10.4 The principal application site is located within the Outer Thames Estuary Special Protection Area (SPA). This SPA was designated for wintering red-throated divers *Gavia stellate* and breeding and foraging little terns *Sternula*

*albifrons* and common terns *Sterna hirundo*. The SPA was extended in 2017 to include the River Yare (and Bure) to close the gap in protection between the Outer Thames Estuary SPA and Breydon Water SPA/Ramsar.

- 10.5 Within a 30km Zone of Influence (Zoi) the ES has identified the following statutory designated sites:
- Southern North Sea Special Area of Conservation (SAC) (identified as the Southern North Sea cSAC in the HRA)
  - Breydon Water SPA/Ramsar
  - Great Yarmouth and North Denes SPA
  - The Broads SAC
  - Broadland SPA/Ramsar
- 10.6 These sites, which are either of international or European importance and are hydrologically linked to the principal application site via the River Yare, are considered within the Habitat Regulation Assessment (HRA).
- 10.7 There are no non-statutory designated sites within a 2km radius of the site and are therefore not considered within the ES.
- 10.8 Stage 1 of the Habitats Regulations Assessment (HRA) concludes that, in the absence of mitigation, increases in sediment deposition and water pollution resulting from construction and/or operation pollution have the potential to affect habitats of the Outer Thames Estuary SPA; Breydon Water SPA/Ramsar and Southern North Sea SAC. An assessment of the implications was undertaken (Stage 2 HRA), in order to inform an Appropriate Assessment (AA).
- 10.9 Stage 1 of the HRA also concluded that the scheme does not have the potential to give rise to other adverse effects on any European sites, their qualifying resources or impact the conservation objectives, alone or in combination with other schemes.
- 10.10 Stage 2 of the HRA concluded that, with appropriate mitigation measures to reduce pollution and sediment, (detailed in the outline Code of Construction Practice (CoCP)) the proposed scheme will not give rise to any likely significant effects that would affect the integrity of any European sites, alone or in combination. Natural England will comment on the appropriateness of the HRA
- 10.11 The County Council notes the Stage 2 HRA is based on breeding bird surveys and draws conclusions for wintering bird species for which the SPA/Ramsar sites are notified. In the absence of data, the assessment assumes potential for the displacement of wintering birds resulting from construction and operation activities and acknowledges that habitats onsite are not suitable for wintering or breeding birds for which the SPA/Ramsar sites are notified. The County Council concur with this assessment.

#### NOx – (Terrestrial Environment)

- 10.12 Chapter 6 of the ES (Document reference 6.1, version number 0, dated 30 April 2019) states that the Lowland Neutral Grassland of Breydon Water SSSI is sensitive to Nitrogen oxide deposition (6.8.40). The report concludes that the annual mean NOx objective of 30 µg/m<sup>3</sup> at Breydon Water SSSI, SPA and Ramsar, will not be exceeded (6.8.39) (see Table 6.19). No mitigation

measures are proposed. The assessment demonstrates that the scheme would not result in these criteria being exceeded at any designated sites, and that effects on such sites due to nitrogen deposition would be negligible.

#### Birds - Qualifying Features of SPA/Ramsar Sites

- 10.13 Breydon Water SPA/Ramsar, The Outer Thames Estuary SPA and the Broads SPA are internationally important for wintering water birds. The focus of the breeding bird surveys was the Common tern. Common tern or other water birds that qualify as features of the Breydon Water SPA/Ramsar were not noted during the 2018 breeding bird survey. It is noted that the Outer Thames Estuary SPA or Broads SPA/Ramsar are not discussed within the report, however this is considered unlikely to affect the assessment as species for which these sites are designated were not observed breeding during the 2018 survey.
- 10.14 Wintering bird surveys have not been undertaken, or impacts assessed. However, industrial/urban habitats within the principal application site are unlikely to support wintering birds, for which the SPA/Ramsar sites are designated.
- 10.15 Overall species recorded during the breeding bird survey reflected assemblages typical of habitat present at the site. 33 species of bird were recorded, including 7 of conservation value, either being Schedule 1 Species, UK BAP species, principal species of Importance and/or listed on the Birds of Conservation Concern (BoCC) Red list. One species of note was black redstart, a Schedule 1 species of the Wildlife & Countryside Act 1981 (as amended), which was observed during the first survey visit and it was considered that two to three territories were present.
- 10.16 The proposed scheme has potential to affect breeding birds and this will need to be taken into consideration, with mitigation and recommendations for restoration and enhancements incorporated within the Scheme. Additional survey work may be required depending on the start date of works to enable the identification of nesting birds and exclusion zones.

#### Terrestrial Environment - Protected and Species of Conservation Concern

- 10.17 The ES assessed the likely significant effects on statutory and non-statutory designated sites, important/protected habitats and legally protected species and species of conservation concern. Mitigation measures are proposed in the Outline CoCP during construction. Long term mitigation measures will be secured through the appropriate wording of Requirement 6.

#### Bats

- 10.18 Buildings within the footprint of the scheme were assessed for bat roost potential in August 2017 and November 2018 resulting in 22 buildings being identified as having low bat roost potential. Two walked transect surveys were undertaken in July and August 2017 and repeated in 2018. Five common pipistrelle bat passes and one *Nyctalus sp.* bat pass were recorded indicating low level use of the site. The ES concludes that it is unlikely that bats roost within these buildings and that the site is of low value for bats. In the absence of mitigation, the scheme is anticipated to have a minor adverse effect (not significant).

- 10.19 Further surveys of structures, including bridges, and any trees need to be undertaken at the appropriate time of year and the results used to assess any Likely Significant Effects and inform the requirement for an EPS mitigation licence, a licence obtained from Natural England, required by the Applicant where it is proposed to disturb, remove or damage the habitats of a EPS. Recommendations for mitigation, compensation and enhancement should be identified and incorporated within the scheme and offsite as necessary.

#### Water Vole

- 10.20 Water vole surveys of the principal application site were undertaken in August 2017 and 2018 and extended in 2019 to include the satellite applications sites. Water voles are present within a total of three ditches along the north of William Adams Way and on the edge of Southtown Common. The water vole population was assessed as being of national value. There is potential for significant impacts to this species resulting from contamination entering the watercourses, although the possibility of this occurring is considered low. The ES concludes that, in the absence of mitigation there would be a moderate adverse effect (significant). Works will directly affect a ditch in which water voles are present, so an EPS mitigation licence will be required. Mitigation and enhancement measures will form part of the licence application and will need to be considered within the drainage and landscaping strategies. This licence will need to be in place in advance of works and works undertaken in line with the mitigation requirements and conditions of the licence.
- 10.21 The potential impacts of de-watering as the method for the disposal of water and draw-down resulting from de-watering as part of the cofferdam need to be considered so that an effective mitigation strategy can be developed and incorporated within the scheme and included within the licence application.

#### Reptiles and Amphibians

- 10.22 During the PEA of the site in 2018 it was considered that reptiles and amphibians, specifically great crested newts, were unlikely to be present, and specific surveys were not recommended. Reptiles and great crested newts were therefore scoped out of EIA. However, in 2019 the potential of the site to support great crested newts was reassessed (Preliminary Ecological Appraisal Update (Appendix 8C)) and it was recommended that great crested newt surveys of watercourses to the west of the A47 (paragraph 3.2.1) be undertaken. In the PEA in 2018 the allotments were identified as suitable habitat for reptiles.
- 10.23 There is therefore potential for the scheme to impact great crested newts and reptiles. Surveys for great crested newts and reptiles will need to be undertaken to enable an assessment of any likely significant impacts to be undertaken and to inform the need for an EPS mitigation licence (for great crested newts) and ensure effective mitigation strategy and enhancement measures are incorporated within the scheme.

#### Trees

- 10.24 Trees to be removed to facilitate the development are identified in the Arboricultural report which sets out the arboricultural implications of the construction of the proposal. There are no Category A trees (as per the categorisation method detailed in BS5837:2012 Trees in relation to design,

demolition and construction– Recommendations) proposed for removal. Tree 15, a mature sweet chestnut, has been assessed to be a Category B tree of moderate quality. Group 26 and part of Group 22, assessed as Category B are also to be removed. According to BS5837:2012 these should be regarded as being of sufficient value to have material consideration through the consenting process within this scheme.

- 10.25 The remaining trees and groups of trees proposed for removal were assessed to be Category C trees, deemed to be of low quality, lacking any special significance either arboriculturally, culturally or as prominent landscape features.
- 10.26 Proposed landscaping secured through Requirement 6 will provide sufficient mitigation for the Category C trees and in the longer term as the landscape matures, will address the loss of the Category B trees.
- 10.27 An outline Arboricultural Method Statement (AMS) has been compiled and is included within Annex A of the Arboricultural Report. This outline method statement describes in principle the tree protection measures which have been identified as suitable for the scheme. A more refined and accurate AMS will be required to support the detailed design and construction phases. This is recognised in the Outline CoCP (document reference 6.16, Sections 5.6.1 to 5.6.4). An updated AMS along with the detailed recommendations within the Arboricultural Report will provide the details required to ensure that retained trees and proposed new landscaping areas are sufficiently protected for the duration of the development. Appropriate tree protection is fundamental to ensure damage does not occur to the trees to be retained with the Order Limits.

#### Marine Environment

- 10.28 Benthic and Fish Survey were conducted on 30th and 31st January 2019. Although the wider estuary environment is classified as a priority habitat, infaunal and epibiota communities identified within the scheme impact zone were identified as being of local value. The ES states the construction and maintenance of the scheme will have little impact relative to the pressures already present due to habitat modification and that the main conservation interest is commercially important fish, which appear to use the area in low numbers, and brown shrimp.
- 10.29 The ES concludes that there will be a negligible effect (not significant) on benthic and fish communities prior to the implementation of mitigation measures set out in the outline CoCP.

#### Eels

- 10.30 The European eel has not been considered within the ES. There is a potential for impacts resulting from construction and operation resulting from the construction of the cofferdams and modification of river velocity resulting from the narrowing of the river channel as a consequence of the bascule abutments (see Sediment Transport Assessment and the DCO makes reference to pumping stations (other works (n) page 65), and closure/partial reduction in the width of the River Yare (e.g. 23, page 15). It is recommended that surveys be undertaken to identify and assess any likely significant effects



to inform any required mitigation measures and recommendations for restoration and enhancements incorporated within the scheme.

- 10.31 The Norfolk Biodiversity Information Service (NBIS) is a single database of environmental information for Norfolk. The biodiversity and geodiversity data collected is validated and verified by County recorders (made up of a team of professionals and volunteers) and used to provide information to a range of people and organisations. NBIS records show that River Lamprey is not present within the River Yare or Breydon Water SPA/Ramsar or the Broads SAC and Broadland SPA/Ramsar sites. However, further information is likely to be available from the EA and the Broadland Catchment Partnership. Smelt have been recorded in the River Yare catchment, the last record being from 1997 at Cantley Dyke. Smelt is listed on the International Union for Conservation of Nature (IUCN) Red list of Threatened Species, it is a UKBAP Priority Species (identified as being most threatened and requiring conservation action) under a Biodiversity Action Plan (a response to the Convention on Biological Diversity, signed in Rio de Janeiro in 1992), providing details and a species of principal importance for the purpose of conserving of biodiversity under the Natural Environment and Rural Communities Act 2006. It is recommended that further consideration of River Lamprey and Smelt is required, and this can be secured by means of an appropriately worded Requirement.

#### Marine-Biosecurity

- 10.32 Consideration needs to be given to the potential risk and impacts of introducing non-native invasive species to the marine environment. It is recommended that a marine biosecurity operation plan is required, detailing measures to minimise or remove the risk of introducing non-native species into the area during the construction, operational or decommissioning phases of the project.

#### Sediment Transport Assessment and Water Framework Assessment

- 10.33 The Sediment Transport Assessment and Water Framework Assessment concludes that impacts to aquatic ecology as a result of the release of sediment-bound contaminants would be negligible and will not affect receptors such as Breydon Water and the North Sea or the tidal regime of the River Bure.

#### NOx

- 10.34 Chapter 6 of the ES states that inshore sublittoral sediment of the Outer Thames Estuary SPA and Breydon Water SSSI is not sensitive to NOx or nutrient Nitrogen deposition and was therefore excluded from the assessment on NOx deposition.

#### Conclusion

- 10.35 Given the nature and scale of the proposed development, it is expected that biodiversity is at risk of being impacted upon. It is recommended that additional surveys are required to enable:
- an assessment of likely significant effects to be undertaken,
  - to identify the need for European Protected Species licences, and

- to inform necessary mitigation measures, compensation and enhancement measures.

10.36 Through appropriate wording of Requirements 5 (code of construction practice) and 6 (landscape) in the draft DCO, which should include the Requirement for a Biodiversity Enhancement Plan and Landscape and Ecological Management Plan covering the ecological and nature conservation elements, it is considered potential impacts can adequately addressed. Should there be a delay in commencement and/or if more than 12 months have passed since surveys were undertaken then update surveys may be required and additional mitigation measures incorporated into the final detailed design.

10.37 All habitat and species data should be shared with Norfolk Biodiversity Information Service in a timely and efficient manner.

## 11. Highways / Local Transport Issues

11.1 To make the best use of, and improve the existing transport infrastructure to the Borough, Core Strategy Policy CS16 (Improving accessibility and transport) supports high priority schemes such as the proposals for a third river crossing over the River Yare *“which appropriately balances the needs of road and river traffic and continuing to protect the route alignment”*. The route is also identified on the Local Plan Policies Map (central) and carried forward into the emerging local policies map. In addition, the policy seeks to ensure that new development does not have an adverse impact on the local road network; minimises impact on existing transport infrastructure and contributes to the Norfolk Local Transport Plan.

11.2 The design of the road has been informed by the Design Manual for Roads and Bridges (DMRB).

11.3 The effects on public transport users; driver delay; pedestrian and cyclist journey times and delay; collisions and safety; and fear and intimidation are assessed in Chapter 17 (Traffic and Transport) of the ES (Document reference 6.1 version number 0, dated 30 April 2019). Also, a detailed Transport Assessment (TA) has been produced which assesses the predicted impact of the proposed scheme on the local highway network.

11.4 During the construction phase there are likely to be temporary impacts on road users due to construction activities being carried out on the road, diversions and road closures and increased traffic due to construction related traffic/activities. The preparation of a detailed CoCP will seek to minimise these impacts. Table 14.22 in Chapter 14 of the ES (Document reference 6.1, version number 0, dated 30 April 2019), identifies the changes to Non-Motorised Users (NMU), including relief from the existing severance that the absence of a crossing at this location creates and additional NMU facilities available once the development is in operation.

11.5 The highway/traffic impacts identified above are also relevant during the operation phase. The proposed scheme incorporates measures such as new junctions to tie into the surrounding road network, controlled crossing facilities, relocation/upgrade of an existing bus stop, VMS and monitoring at key points across the network. The County Council is content that the measures will

deliver highway improvements, ensure the safe and convenient use of the highway network and minimise delay.

## **12. Minerals and Waste Planning**

- 12.1 Core Strategy Policy CS12 (Utilising natural resources) promotes the use of secondary and recycled aggregates in all new non-residential development.
- 12.2 Minerals and Waste Local Plan Policy CS16 (Safeguarding mineral and waste sites and mineral resources) seeks to safeguard existing, permitted and allocated mineral extraction and associated development and waste management facilities. Development proposals which would prevent or prejudice the use of safeguarded sites for those purposes will not be permitted unless suitable alternative provision is made.
- 12.3 The principal application site is partially underlain by a Mineral Safeguarding Area (sand and gravel) safeguarded as part of the adopted Norfolk Minerals and Waste Core Strategy and Development Management Policies DPD. The eastern bank of the River Yare is underlain by safeguarded mineral resources; the western bank is not, as deposits here are primarily clay, sand, silt and peat. There are also a number of safeguarded waste management facilities whose consultation areas intersect the principal application site boundary
- 12.4 There are potential impacts of waste and materials during construction and operation, and indirect impacts as a result of traffic management operations. Reuse and/or recycling of material arising from the demolition and construction phases are welcomed, and the preparation of a Mineral Resource Assessment will assist in ascertaining whether the extracted materials is suitable for reuse and also inform the Materials Management Plan (MMP). The potential impacts can be addressed through Requirement 5 (CoCP) of the draft DCO.

## **13. Air Quality and Amenity (including noise, dust and vibration)**

- 13.1 It is expected that issues relating to air quality and amenity (including noise, dust and vibration) are to be addressed by Great Yarmouth Borough Council as part of its statutory function responsible for environmental health. Providing the Borough Council is satisfied the relevant impacts have been identified and adequately addressed in the application submission and draft DCO, no concerns are raised.

## **14. Socio-economic and Community Issues**

- 14.1 Core Strategy Policy CS6 (supporting the local economy) recognises the need to continue to strengthen the local economy and sets out criteria in which Great Yarmouth Borough Council consider it can be achieved.
- 14.2 Community facilities and green infrastructure are key in maintaining sustainable communities, to reduce levels of deprivation and social exclusion and support adequate social and community infrastructure. Therefore, in Core Strategy Policy CS15 (Providing and protecting community assets and green infrastructure) the Borough Council seeks to ensure new development

is supported by good access to a range of community facilities, takes a positive approach and works with partners to deliver essential community facilities.

- 14.3 The impact of the proposed development on businesses, people and communities within the Great Yarmouth area is covered in the Chapter 14 (People and Communities) of the ES (Document reference 6.2, version number 0, dated 30 April 2019) and the Applicant's case for the proposed development (Document reference 7.1: Case for the Scheme (including Planning Statement), version number 0, dated 30 April 2019).
- 14.4 Statistics set out in the MHCLG English Indices of Deprivation 2019 shows that nationally, Great Yarmouth is one of the most deprived areas in England with regards to employment, education, skills and training and living conditions. As set out in the Applicant's Case for the Scheme, economic activity is estimated to be lower than both the national and regional average and there are low opportunities to gain employment – lower than elsewhere in the region and country. Whilst Great Yarmouth has a dominant tourism role, this does result in seasonal unemployment in an area that suffers low educational achievement and has a low population with high-end skills.
- 14.5 Great Yarmouth is also dominated by the energy and port sectors. Great Yarmouth along with Lowestoft forms England's most important and substantial base for supporting offshore energy in the whole of England, second only to Aberdeen, and is identified as one of the few deep-water port locations able to handle construction, assembly and manufacturing of wind turbines, along with operations and maintenance.
- 14.6. Current issues centre around inadequate access to the Port area. Congestions and delays due to limited opportunities to cross the River also contribute to the ability of the Port to perform to its local and national role in serving the energy sector and to encourage further investment.
- 14.7 During the construction phase the likely significant impact of the proposed development will be associated with employment. Chapter 14 of the ES includes the indicative number of jobs expected to be created during construction, and that construction workers could be sourced from beyond the local and regional areas, which is considered a positive impact to the area. The long term impacts relate to the community and the permanent loss of properties (through demolition) and land associated with the MIND centre, required to facilitate the proposed development. However, the proposed development includes the reinstatement of the MIND centre and relocation of allotments. In addition, the Local Housing Authority have been assisting in rehousing occupiers of residential property. As a Local Authority (carrying out public functions), the Applicant must comply with its Public Sector Equality Duty (PSED) under the Equality Act 2010.
- 14.8 At a local level, a priority is to continue to promote employment opportunities, to build relationships between the industrial estates that wholly or partially service the port/energy sector and the wider highway benefits to reduce congestion and attract and retain business to the area. It is recognised by the County Council that the delivery of this proposed infrastructure project will help to deliver both strategic and local objectives to ensure the opportunities

to maximise the economy (including job opportunities, investment and growth) of Great Yarmouth are maximised.

## 15. Draft Development Consent Order (DCO)

- 15.1 A number of areas in the draft DCO have been identified where the Council as relevant planning authority is seeking to satisfy itself on the scope and enforceability of the construction methods/controls, mitigation measures and on-going maintenance. Below sets out the County Council's current concerns, and suggested amendments.

### Schedule 2 Requirements

- 15.2 Requirement 4: Paragraph 15.2 of the Planning Inspectorate Advice Note Fifteen: Drafting Development Consent Orders (v2, 2018) states that *"requirements should be precise, enforceable, necessary, relevant to the development, relevant to planning and reasonable in all other respects."* It is considered that the draft wording of this requirement is not precise and would be difficult to enforce. It is ambiguous in that what is considered to be in 'general' accordance by one individual is not necessarily considered that by another. In the avoidance of doubt, it is requested that the requirement be amended so the authorised development is designed and implemented in accordance with a list of plans/documents.

### *Design of the authorised development*

4.—(1) *No part of the authorised development is to commence until the final version of the general arrangement plans and approach to detailed design has been submitted by the undertaker and approved in writing by the county planning authority. The authorised development must be designed and implemented in **general** accordance with— (a) the general arrangement plan; and (b) the approach to detailed design.*

- 15.3 Requirement 5: The county planning authority welcome that the construction is undertaken in accordance with the Code of Construction Practice (CoCP). For the avoidance of doubt, can the Applicant clarify whether criteria (d) includes the Mineral Resource Assessment, Materials Management Plan and Site Waste Management Plan (SWMP) referred to in the ES? Also does criteria (e) cover dust, noise, vibration, mud and air quality during construction?
- 15.4 Requirement 6: It is requested that this requirement be amended to include recommendations made in the protected species reports and include Natural England be included as a named consultee in the wording of the requirement.

### *Landscaping **and Ecology***

6.—(1) *No part of the authorised development is to commence until a written landscaping **and ecological management plan and biodiversity enhancement plan covering the ecological and nature elements scheme** for the authorised development has been submitted to and, following consultation with Great Yarmouth Borough Council **and Natural England**, approved in writing by the county planning authority.*

(2) The landscaping and ecological management plan and biodiversity enhancement plan scheme prepared under sub-paragraph (1) must be in general accordance with the landscaping plans, and the approach to detailed design and include the following which must comply with the relevant mitigation measures set out in the Environmental Statement –

set out— (a) details of all proposed hard and soft landscaping works, including location, species, size and planting density of any proposed planting;

(b) cultivation, importing of materials and other operations to ensure plant establishment;

(c) proposed finished ground levels;

(d) hard surfacing materials;

(e) any ecological mitigation areas;

(f) details of any existing trees, hedges and shrubs to be retained;

(g) implementation timetables for all landscaping works; and

(h) details of the maintenance regime for the landscaping scheme, which must provide for maintenance for a period of 15 years commencing with that date of completion of the landscaping works.

i) details of enhancement measures for bats, birds (including black redstart), and water voles

(j) details of the landscape, ecological and nature conservation works and measures;

(k) details of the implementation of the ecological and nature conservation works and measures; and

(l) details of the management, monitoring and maintenance of ecological and nature conservation works and measures

(3) All landscaping works must be carried out and maintained in accordance with the landscaping scheme approved under sub-paragraph (1). The landscape and ecological management plan and the biodiversity enhancement plan must be implemented in full.

(4) Any plants planted as part of the approved Landscape and Ecological Management Plan that, within a period of 5 years after planting, is removed, dies or becomes in the opinion of the county planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species as that originally planted.

(5) In the event that any European protected species is found at any time when carrying out the authorised development which was not previously identified in the environmental statement, the species and its location must be reported immediately to Natural England and the county planning authority.

(6) A scheme for the protection of, and mitigation measures for, the relevant European protected species, must be agreed in writing with Natural England and implemented immediately

- 15.5 Requirement 9: In respect of this requirement the county planning authority will consult with Norfolk Fire and Rescue Service (NFRS) on the emergency preparedness and response plan in the event of a fire. It is requested that NFRS be included as a named consultee in the wording of the requirement.

## *Emergency Preparedness and Response Plan*

9.—(1) *No part of the authorised development is to be opened to the public until an emergency preparedness and response plan has been submitted to and, following consultation with Great Yarmouth Borough Council, the lead local flood authority, **Norfolk Fire and Rescue Service** and the Environment Agency, approved in writing by the county planning authority.*

*(2) The submitted emergency preparedness and response plan must include provision as to the actions and measures to be taken in relation to the authorised development to prepare for and respond to the following emergencies— (a) a flood event; (b) a fire event; and (c) an incident involving terrorism or other substantial threat to security.*

*(3) The approved plan must be implemented in full.*

- 15.6 Requirement 10: It is intended to connect the proposed development to an Anglian Water (AW) combined sewer, therefore in respect of this requirement the county planning authority will consult AW in relation to a surface water drainage strategy. It is requested that AW be included as a named consultee in the wording of the requirement.

### *Surface water drainage*

10.—(1) *No part of the authorised development which comprises any part of a surface water drainage system is to commence until written details of that surface water drainage system have been submitted to and, following consultation with **Anglian Water**, Great Yarmouth Borough Council, the lead local flood authority and the IDB, approved in writing by the county planning authority.*

*(2) The surface water drainage system submitted for approval **by the county planning authority** under sub-paragraph (1) must be in accordance with the drainage strategy and include a timetable for implementation.*

*(3) The surface water drainage system must be constructed in accordance with the system approved under sub-paragraph (1).*

- 15.7 Requirement 11: For consistency thought out the wording of the Requirements, it is suggested that this requirement is amended.

### *Lighting*

11.—(1) *No numbered work comprised in the authorised development is to commence until a written scheme of the lighting to be provided for that work on opening for public use (except lighting to be provided to interior of a building) has been submitted to and, following consultation with Great Yarmouth Borough Council, approved in writing by the county planning authority.*

*(2) The written scheme of proposed lighting submitted for approval **by the county planning authority** under sub-paragraph (1) must be in accordance with the lighting report and include a timetable for implementation.*

*(3) The numbered work in question must be carried out in accordance with the scheme approved under sub-paragraph (1) and the approved lighting must be permanently maintained thereafter.*



*(4) Nothing in this requirement restricts lighting of the authorised development during its construction or as temporarily required for maintenance.*

Part 2 of the draft DCO

- 15.8 Article 18(1): Given the scale of the development, the level of details required to be submitted post decision and the number of external consultees involved in the process to discharge to the requirements of the DCO, the 6 weeks deemed discharge process set out in the draft DCO is considered to be insufficient to be able to consider the subsequent applications. In the interests of consistency, it is respectfully requested that the wording of this article be amended in line with the provisions set out in the Town and Country Planning Act 1990.

*18.—(1) Where an application has been made to the relevant discharging authority, the discharging authority must give notice to the undertaker of the discharging authority's decision on the application within— (a) a period of 86 weeks beginning with— (i) the day immediately following that on which the application is received by the discharging authority; or (ii) where, further information has been requested by the discharging authority under paragraph 19, the day immediately following— (aa) the day the further information was supplied; or (bb) where an appeal has been made by the undertaker under sub-paragraph 20(1)(d) or (e) and the appeal is allowed, the day on which the appeal was determined by the Secretary of State; or (cc) where an appeal has been made by the undertaker under sub-paragraph 20(1)(d) or (e) and the appeal is dismissed, the day on which the relevant further or additional information is supplied; or (b) such longer period as the discharging authority and the undertaker may agree in writing.*

*(2) Subject to sub-paragraph (3), in determining an application for a specified consent, the discharging may— (a) grant the specified consent, either unconditionally or subject to reasonable conditions; or (b) refuse the specified consent, and where the specified consent, agreement or approval is refused or granted subject to conditions, the discharging authority must provide reasons for the refusal or (as the case may be) conditions in the notice of its decision with the notice of the decision.*

*(3) In the event that the discharging authority does not give notice of its decision within the period set out in sub-paragraph (1), the discharging authority is taken to have granted the specified consent sought by the application without any condition or qualification at the end of that period.*

## 16. Conclusions

- 16.1 The delivery of the Great Yarmouth Third River Crossing has been a strategic ambition of the County Council for a number of years, which in summary will provide for highway improvements connecting the A47 to the port area, deliver links to the nationally significant role in the renewable energy sector and the offshore oil and gas Industry, and encourage economic growth to the wider area.



- 16.2 This LIR has been prepared to consider the impacts on the proposed development on the administrative area of Great Yarmouth.
- 16.3 The LIR demonstrates that there will be some direct and indirect impacts as a result of the proposed development. As the relevant planning authority, subject to satisfactory resolution of outstanding matters, it is satisfied that the impacts are capable of being controlled by appropriately worded Requirements contained within the DCO should the DCO be made.

## Appendix A – Historical Flooding Details.

NCC Lead Local Flood Authority Surface Water Management Plan Stage 1 - 2011 - indicative areas that experienced flooding in 2006. Figure 3

NCC Lead Local Flood Authority Surface Water Management Plan Stage 2 - 2014 - Reports of flooding up to July 2013 of Great Yarmouth Highway flood records and LLFA Preliminary Flood Risk Assessment (which are similar areas to the indicative drawing from 2006). Figure 4

NCC Lead Local Flood Authority Flood Investigation -Great Yarmouth Flooding 2014 - flooding of 3 properties internally in May and July 2014 were investigated (King Street and Beccles Road) but there were also other properties that experienced external flooding at this time

NCC Lead Local Flood Authority Flood Investigation - Gorleston 2016 and 2017 - flooding of 14 properties of which 3 properties were internally flooded, these were all located on Burgh and Beccles Road (Feb 2016 and July 2016). Figure 5

NCC Lead Local Flood Authority have received numerous reports of flooding on the 6 October 2019. The Flood Investigation into this event is now ongoing and due to publish early in 2020. Unpublished initial information indicates at around 39 properties flooded, 19 internally with gardens, roads and transport routes effected. The areas initially include Burgh Road, Beccles Road, Gainsborough Road and Turner Close. Some properties are the same that have flooded on previous years.

Friday the 15 April 2016, Southgates Road (at Newcastle Road Junction), Blackfriars Road and Camdon Road flooded. This report can be viewed at <https://www.greatyarmouthmercury.co.uk/news/great-yarmouth-flooding-caused-by-power-cut-1-4499560> The flooding in the pictures is about 500m north of the Application Site and is within the area highlighted by the high risk of flooding (3.33% AEP or 1:30 year) on the Environment Agency Risk of Surface Water Flood Map. There were no official reports of flooding submitted to the Lead Local Flood Authority on this occasion however newspaper reports stated an Anglian Water pumping station was flooded and the combined sewer system backed up flooding the area. The LLFA did follow up these reports with site visits and contacting Anglian Water and are satisfied the media report is valid. There is no return period available for this flood event

Great Yarmouth Borough Council Strategic Flood Risk Assessment of Great Yarmouth 2017. Includes a summary of Historic Anglian Water records of flooding (DG5 records). There are 4 incidences that are within post code NR30 3 (which covers the application site east and west of the River Yare - noted in the Applicant's FRA) but also 52 incidents in NR31 8 (which includes Burgh and Beccles Road in the same hydrological catchment as the Application Site). It is important to note that any flood event that is less frequent than the 4.5% AEP (or around 1:22 year) is not recorded by Anglian Water as a flood, since 2011 these incidences are recorded the Lead Local Flood Authority. The data by Anglian Water supports all other sources of historic flooding and predicted flood risk in the area.

Great Yarmouth Surface Water Management Plan - Options Appraisal Summary

PROBLEM IDENTIFIED:

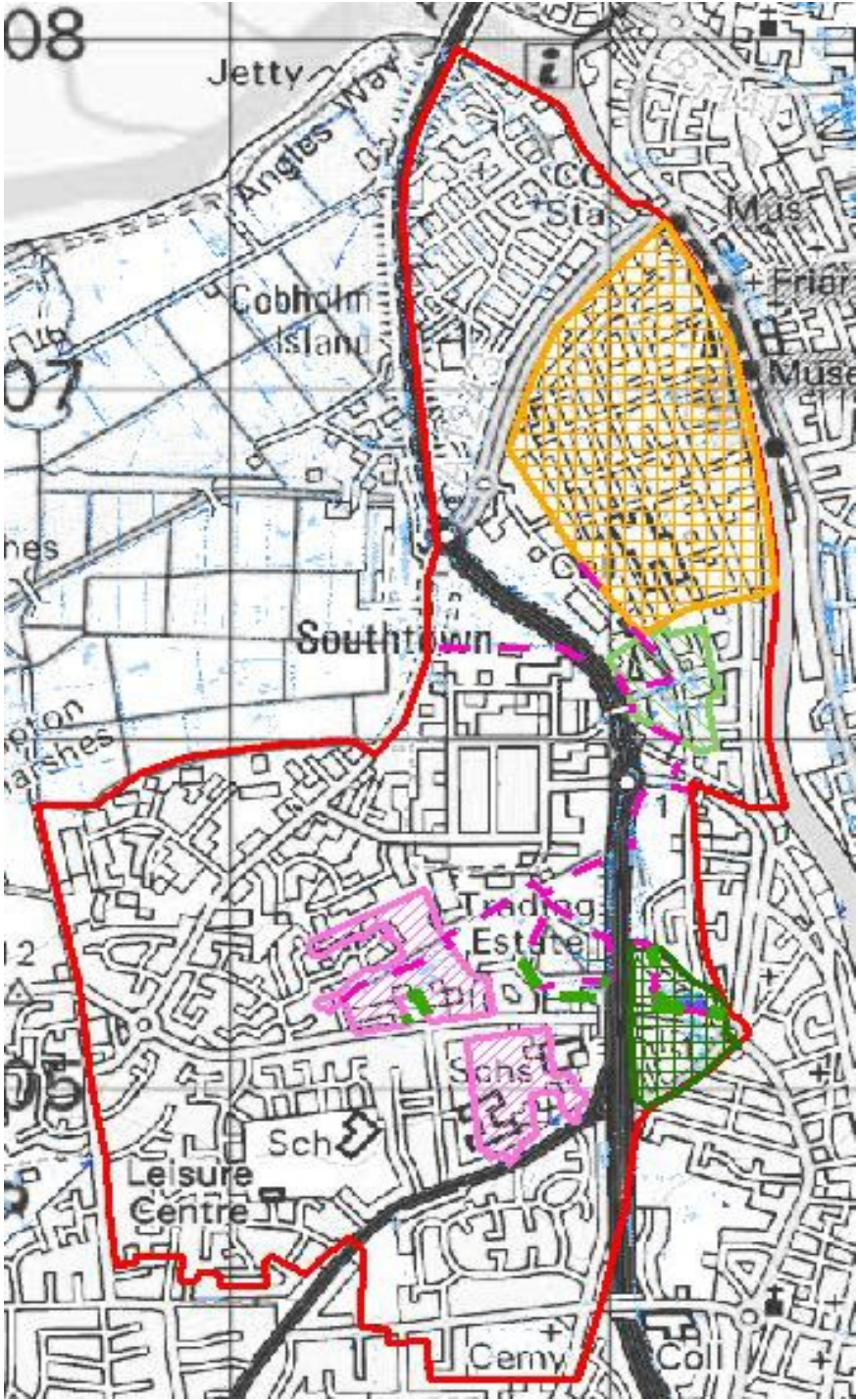
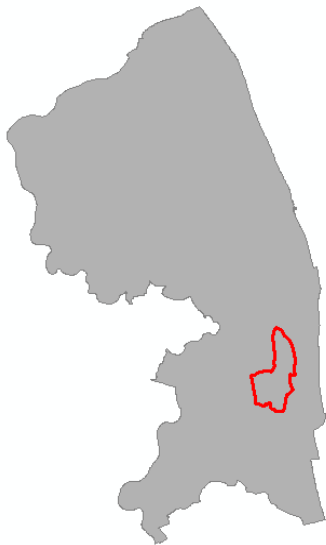
This CDA is located in the Claydon, Cobholm and Southtown area of Great Yarmouth. The pluvial modelling indicates surface water flooding across the central portion of the CDA as a result of the topography and surface water being trapped behind raised road embankments. The CDA contains several IDB managed land drains that assist in mananging surface water flows from urbanised areas, but periodic routine maintenance is required to allow the drainage system to adequately collect and remove surface water and mitigate flood risk. The preferred solution for this area is a combination of improved maintenance, development control in undeveloped areas, large scale SUDS in both commecial (Southtown) / residential (east end of Burgh Road) areas and small scale embankments around the ditches in high risk locations.

Despite numerous known surface water flooding issues in the Southtown area, the modelling did not predict any substantial surface water flooding. It is noted that Anglian Water is currently updating their sewer models in this area and additional information will be available in the near future. Further investigation is proposed as the interim 'solution' in this area.

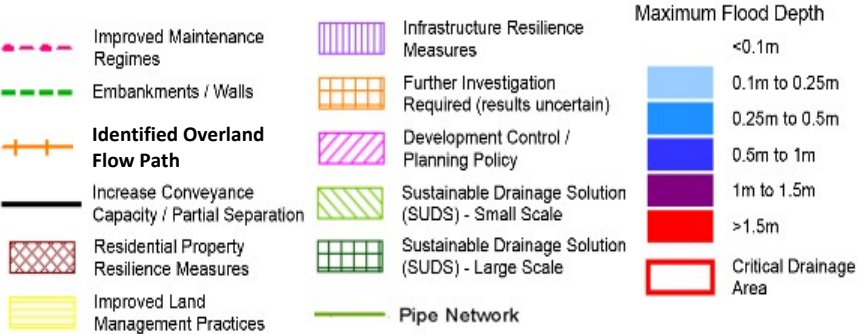
Critical Drainage Area

Claydon, Southtown and Cobham

Great Yarmouth Borough



LEGEND



PREFERRED OPTIONS SUMMARY:

Options Summary	Available Option	Preferred
Do Nothing		
Do Minimum		
Improved Maintenance		
Planning Policy		
SUDS (Source Control - Small Scale)		
SUDS (Large Scale - Flood Storage)		
Separate Surface Water and Foul Water Sewer Systems		
De-culvert / Increase Conveyance		
Identified Overland Flow Routes		
Community Resilience		
Infrastructure Resilience		
Other - Improvement to Drainage Infrastructure		
Other or Combination of Above		

Flood Risk Source

Surface Water	Yes
Groundwater	Yes
Ordinary Watercourse	Yes
Fluvial	No
Tidal	No

Validation

Historic Events	Yes
Site Inspection	Yes



# GREAT YARMOUTH SURFACE WATER MANAGEMENT PLAN

## SURFACE WATER OPTIONS

### HIGH LEVEL CONSTRUCTION COST ESTIMATE

**Critical Drainage Area ID: Claydon, Southtown and Cobham**

Description	Unit Type	Unit Measure	Unit Rate	Quantity (approx)	Cost (rounded)	Assumptions
Improved maintenance						No capital cost - assumed to be paid for by revenue budgets
Embankments	Embankment	Volume of Embankment m <sup>3</sup>	£5	1350	£6,000	1200m long, 1.5m tall, 1.5m wide, triangular
Development Control						No cost associated - set policy to be implemented by developer
SUDS - Large Scale	Permeable paving	m <sup>2</sup> Surface Area	£54	1350	£73,000	300m of road at 4.5m wide
SUDS - Large Scale	Ponds and wetlands	m <sup>3</sup> Detention Volume	£40	5000	£202,000	
SUDS - Small Scale	Permeable paving	m <sup>2</sup> Surface Area	£54	10000	£538,000	Commercial area around Boundary Road / Suffolk Road - Assumed to be 50% funded by land owners
Further Investigation			£10,000	1	£10,000	Consultancy fee for further investigation
				TOTAL	£829,000	

#### NOTES:

The following standard assumptions have also been applied:

The costs are the capital costs for implementation of the scheme only.

Costs do not include provisions for consultancy, design, supervision, planning process, permits, environmental assessment or optimum bias.

No provision is made for weather (e.g. winter working).

No provision is made for access constraints.

Land acquisition costs are not included

No operational or maintenance costs are included.

No provision is made for disposal of materials (e.g. for flood storage or soakaway clearance).

These should be considered as approximate order of magnitude costs only.



Great Yarmouth Surface Water Management Plan - Options Appraisal Summary

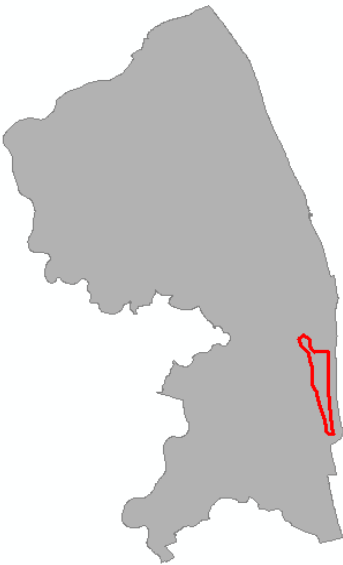
PROBLEM IDENTIFIED:

This CDA is located in the South Yarmouth area of Great Yarmouth. The pluvial modelling indicates surface water flooding across the localised areas of the CDA as a result of the topography and water being trapped behind raised building pads. The CDA contains residential and commercial buildings, many of the properties are known to contain basements and are potentially at greater risk of being affected by surface water ponding on roads and around buildings (Camperdown Road). Flood zone 3 extends across the south western portion of the CDA and extends to 25% of the area. Tidal flooding affects land in close proximity to the beach frontages and measures along the coastline frontage are in place to mitigate tidal flooding, but adversely may act to retain surface water landward. The CDA is classified as being at low risk of groundwater flooding. The CDA is low lying and there is limited scope to create effective storage areas in built up areas, some capacity may be available under roads.

Critical Drainage Area

South Yarmouth

Great Yarmouth Borough



LEGEND

Improved Maintenance Regimes

Embankments / Walls

Identified Overland Flow Path

Increase Conveyance Capacity / Partial Separation

Residential Property Resilience Measures

Improved Land Management Practices

Infrastructure Resilience Measures

Further Investigation Required (results uncertain)

Development Control / Planning Policy

Sustainable Drainage Solution (SUDS) - Small Scale

Sustainable Drainage Solution (SUDS) - Large Scale

Pipe Network

Maximum Flood Depth

<0.1m

0.1m to 0.25m

0.25m to 0.5m

0.5m to 1m

1m to 1.5m

>1.5m

Critical Drainage Area

PREFERRED OPTIONS SUMMARY:

Options Summary	Available Option	Preferred
Do Nothing		
Do Minimum		
Improved Maintenance		
Planning Policy		
SUDS (Source Control - Small Scale)		
SUDS (Large Scale - Flood Storage)		
Separate Surface Water and Foul Water Sewer Systems		
De-culvert / Increase Conveyance		
Identified Overland Flow Routes		
Community Resilience		
Infrastructure Resilience		
Other - Improvement to Drainage Infrastructure		
Other or Combination of Above		

Flood Risk Source

Surface Water	Yes
Groundwater	No
Ordinary Watercourse	No
Fluvial	Yes
Tidal	Yes

Validation

Historic Events	Yes
Site Inspection	Yes

GREAT YARMOUTH BOROUGH COUNCIL

Norfolk County Council

anglianwater

Environment Agency

URS

CAPITA SYMONDS

# GREAT YARMOUTH SURFACE WATER MANAGEMENT PLAN

## SURFACE WATER OPTIONS

### HIGH LEVEL CONSTRUCTION COST ESTIMATE

**Critical Drainage Area ID: South Yarmouth**

Description	Unit Type	Unit Measure	Unit Rate	Quantity (approx)	Cost (rounded)	Assumptions
Property level resilience	Improved resilience and resistance measures	per property protected	£5,000	15	£75,000	
SUDS - Small Scale	Permeable paving	m <sup>2</sup> Surface Area	£54	45175	£2,428,000	
SUDS - Small Scale	Road side Rain Garden	m <sup>2</sup> area	£21	2600	£54,000	2.6km of road in upper catchment - 1m wide rain gardens on one side
				TOTAL	£2,557,000	

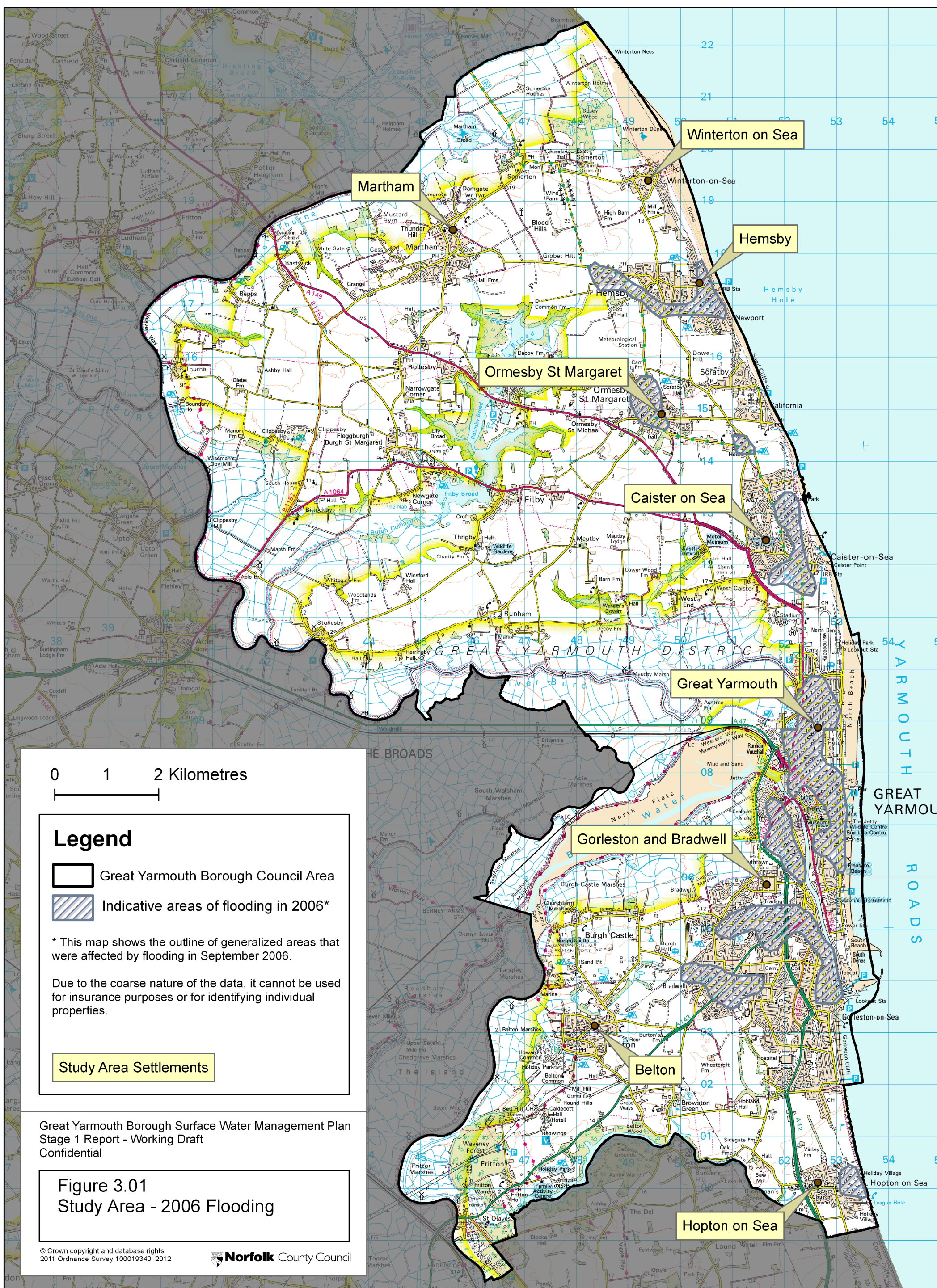
#### NOTES:

The following standard assumptions have also been applied:

- The costs are the capital costs for implementation of the scheme only.
- Costs do not include provisions for consultancy, design, supervision, planning process, permits, environmental assessment or optimum bias.
- No provision is made for weather (e.g. winter working).
- No provision is made for access constraints.
- Land acquisition costs are not included
- No operational or maintenance costs are included.
- No provision is made for disposal of materials (e.g. for flood storage or soakaway clearance).

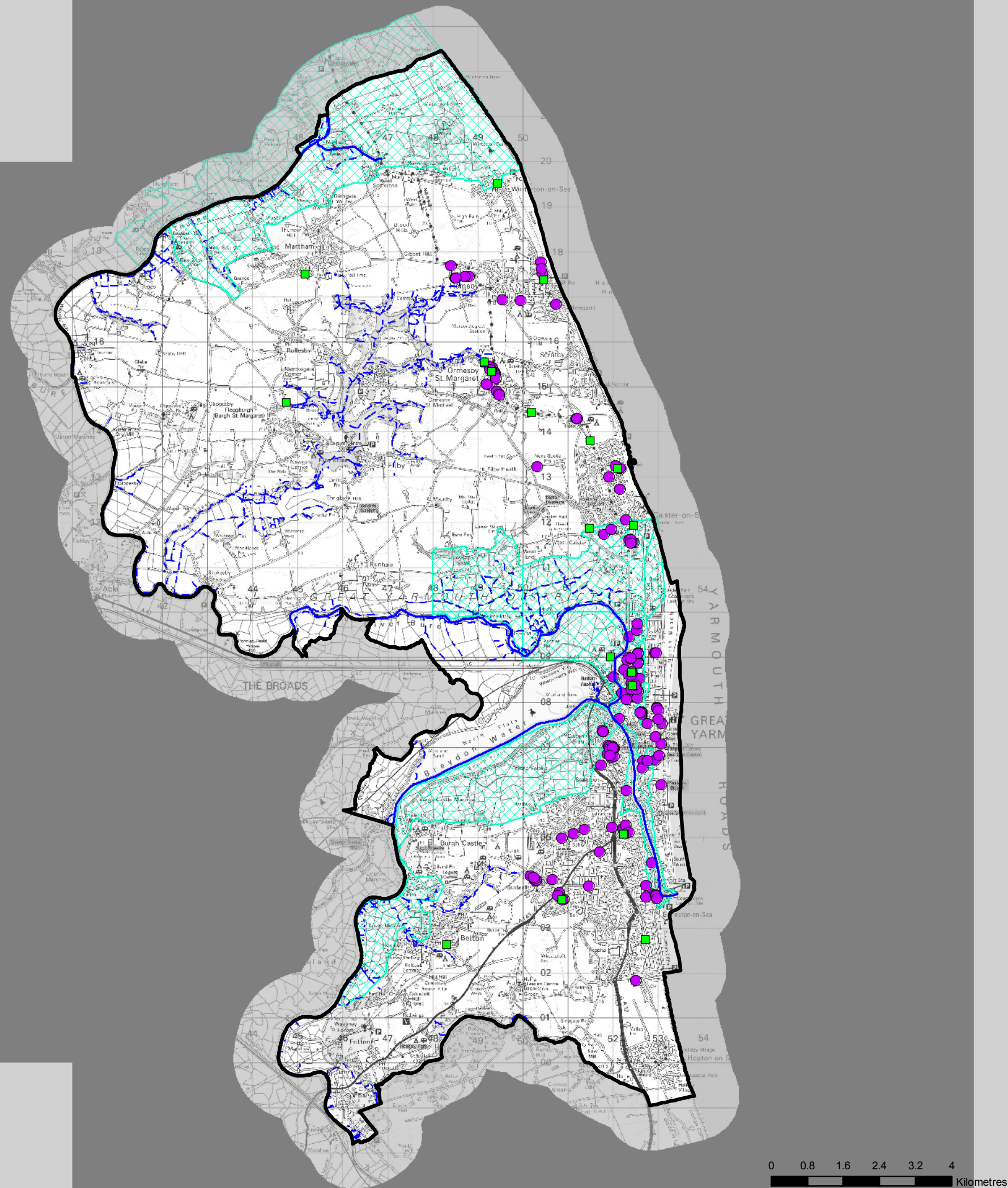
These should be considered as approximate order of magnitude costs only.














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THIS DRAWING MAY BE USED ONLY FOR  
THE PURPOSE INTENDED

#### Legend

-  Administrative Boundary
-  Main River
-  Ordinary Watercourse
-  Culverted Watercourse
-  Environment Agency's Historic Flood Map
-  Flood Incidents (PFRA)
-  Great Yarmouth Highways flood records

#### Notes

### Great Yarmouth Borough



### Surface Water Management Plan

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SWMP project.

Scale at A3	Date	Drawn by	Approved by
1:95,000	July 2013	G.ATHANASIA	M.ARTHUR

#### Historical Flooding Overview DRAFT

#### Consultant

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### FIGURE 6



